

Revised 06/23/00

LOS ALAMOS COUNTY FLOOD CONTINGENCY PLAN

WARNING NOTIFICATIONS (POLICE DISPATCH)

Due to the recent fire and the monsoon rains approaching, flooding within the County is a realistic possibility. There are several ways in which notification of an approaching storm or rainshower may be made. You may be notified by any of the following:

- The National Weather Service
- Captain Repass
- LANL Meteorologist
- LANL EM&R
- RAWs (Remote Automated Weather Station)

IF A WARNING NOTICE IS RECEIVED AT LAPD, THE DISPATCHER MUST IMMEDIATELY NOTIFY THE FOLLOWING PEOPLE. IF THE WARNING IS FROM RAWs, CALL THE NATIONAL WEATHER SERVICE (1-888-386-7637) FOR MORE INFORMATION AND PROCEED WITH THE FOLLOWING NOTIFICATIONS:

1. National Weather Service (1-888-386-7637)
2. Shift Commander will call,
 - Lt. Mazuranich will call,
 - Capt. Brownlee will call,
 - Chief Melton will call,
 - Joe King
3. Captain Repass
4. Ringdown (CAS) - EM&R
 - Fire
 - PTLA
5. Dave Riker or Kyle Zimmerman (the dispatcher should make an announcement on the Public Works Radio of the warning notice)
6. Chris Ortega or Tim Glasco
7. Bayo Canyon Sewer Plant (0730-1630 hours)
8. School Admin.-Jim Anderson (when school is in session)
9. Los Alamos Medical Center (661-9580)

As time allows, please notify the following:

1. State Police 827-9301
2. State EOC 476-9600 (after hours SP District 1 @ 827-9301)
3. Corps of Engineers (one of the following)
 - Don Soards 342-3269 275-3045
 - Tim Ryan 342-3268 291-0995
 - Matt Bourgoise 342-3267 299-2256

When the notification is made, the Communication Center may become very busy and the dispatcher will need to call in another dispatcher. You will also need to call the Detention Officer on duty to help with the above notifications.

Dispatchers MUST monitor the SWANS radio. The SWANS radio is the "lab" radio in dispatch. The radio will need to be tested once every day. Use "LAPD to EMO" and advise of the radio test. If there is no response, call 667-6211. It is imperative that this radio be monitored. There is a slight possibility the Storm Warning will come over the SWANS radio. This is unlikely, but in the event that this should occur, you will still need to notify the above people. EMO will also use this radio to notify people in work areas located in the canyons.

There are two RAWs in Santa Clara Canyon which will alarm in the Los Alamos Communication Center and in the Santa Clara Fire Dispatch Center. If a breach of State Road 30 occurs, Santa Clara Dispatch will notify the Los Alamos Police Department.

If a breach of Diamond Drive at the fill should occur or a breach of the reservoir, the State Police (SF) should be notified. They will need to contact the State Highway Department and BIA, who will notify San Ildefonso and Santa Clara Pueblos. If the State Police cannot make the notification immediately, dispatch should contact Santa Clara Fire Dispatch at 753-7326 and BIA Dispatch at 455-2295. You will need to make sure that the dispatcher on duty at State Police is aware of this.

In the meantime, when calls are received in the Communication Center in reference to rain or flooding, you may advise the caller that the weather is being monitored closely and that as much notification as possible will be given.

STORM WARNING TELEPHONE LISTING

	Office	Home*	Pager	Cell
National Weather Service	1-888-386-7637			
Chief Melton	662-8227	672-2726	660-7613 / 660-7613 1-800-494-1610	
CAO/Joe King	662-8080	661-7207		
Captain Repass	662-8285	672-9158	984-5836 / 660-8285 660-8285	
Jim Griffiths		662-9155	381-0310	
Captain Brooks	662-8228	662-2761	660-7316	660-7316
Captain Brownlee	662-8229	672-9727	660-7503	660-7503
Lt. Mazuranich	662-8232	662-7769	660-7498	660-7498
Wendy Strain	662-8281	829-3041	988-8202	
Fire Chief MacDonald	662-8308	672-4041	665-9800 + 699-1407 104-1051	
Deputy Chief Tucker	662-8309	661-6118	665-9800 + 699-1784 104-1052	
Chris Ortega	662-8140	672-9789	381-0186	470-3943
Tim Glasco	662-8148	662-1492	988-8406	
Dave Riker	662-8106	661-8101		690-1605
Kyle Zimmerman	662-8151	662-4154		660-0991
LANL	667-6211			
Scholl Admin.- Jim Anderson	663-2222	662-9410	984-5917	470-1222
Los Alamos Medical Center	661-9580	(Ask for Administrator or Charge Nurse)		
Bayo Canyon Sewer Plan	662-8269 / 662-8343			

*Remember that these home telephone numbers are confidential and should not be given to the general public.

Additional useful phone numbers:

	Office	Home*	Pager	Cell
Amateur Radio				
Bob Cowan	662-7926		984-4672	
Bill Boedecker	667-4008	662-4220		
BIA Dispatch	455-2295			
KRSN	661-2490			
	662-1999			
	661-2476 (fax)			
Mark Bentley		474-8284		660-0204
Bob Clark		989-8432		690-3395
Bill Rogan		662-9208		690-3395
Red Cross				
Marla Griffith (primary contact)		662-4330		660-4523
Carolyn McAboy (secondary contact)				(207) 229-0994
Totavi Gas Station	445-1940			
U.S. Forest Service (until about July 4)				
Mike Edrington (Area Commander)	(505) 269-0557			
Jim Furlong / Dick Gormley (North Zone Incident Commanders)	(505) 753-2620			
Randy Ostman (South Zone Incident Commander)	(505) 661-2901			

Emergency bus drivers for White Rock

Bill Schutz	672-9767
Geoff Rodgers	672-0486
Twila Bowyer	672-1914
Roger Payne	672-9645
Fire Station 3 (Contact point if none Of the above drivers are available)	672-3221

Emergency bus drivers for Los Alamos

Tammy Robbins	662-7544
Jeri Axtell	662-1448
Jan Douglass	662-1959
Rick Reiss	662-6884
Cheryl Cranfill	662-9022
Fire Station 4 (Contact point if none Of the above drivers are available)	662-2265

Los Alamos Schools Transportation Office	663-2255
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POLICE DEPARTMENT ACTIONS

The following plan is to be followed by the shift commanders in response to significant rains in the Los Alamos and White Rock areas:

LOS ALAMOS

- When LAPD Communications is advised of a storm warning alert, the shift commander will direct at least one officer to a safe location near the east side of the "Fill Bridge" when significant rainfall has occurred in the Los Alamos area. This officer is responsible for observing water draining from overflow pipe for the Fill Bridge basin. Water drainage information will be relayed to LAPD Communications, the shift commander, or Capt. Repass. See the attached Map for information regarding the location of the Fill Bridge basin overflow pipe.
- The order to close Diamond Drive and North Road will be given by the shift commander or person of higher rank. This order will be based upon information relayed to LAPD by Public Works, who will decide if the bridge is unsafe after observing runoff and drainage from the Fill Bridge. LAPD will make the decision, based on the trigger point given above, in the absence of information from Public Works.
- Once the order is given to shut down Diamond Drive due to unsafe road conditions, barricades will be placed across the entrance to North Road and Diamond Drive. North Road at Sycamore, the southbound lanes of Diamond Drive on the north side of the Fill Bridge, and the northbound lanes of Diamond Drive south of the Fill Bridge. Officers may need to use the traffic cones in their units to set up temporary barricades until larger barricades can be put in place.
- If officers observe extreme run-off west of the Fill Bridge basin area, North Road should be closed immediately as this roadway is in most danger of being washed out before Diamond Drive will be affected by run-off.
- PTLA will monitor water levels in Los Alamos Canyon. In the event of significant rainfall or flooding conditions PTLA patrols will notify the Central Alarm Station who will then notify LAPD dispatch. LAPD dispatch should notify the State Police and request that they notify the pueblos.
- Officers are cautioned not to drive through more than one foot of water as this may flood out the engine of the patrol unit causing it to stall and further endangering the officer.
- As staffing allows, an officer needs to ensure the barricade at San Ildefonso and Paseo Penasco is in place (Barranca Mesa/Rendijia Canyon Road).

- Also as staffing allows, one officer needs to be clearly visible on Diamond Drive to deter anyone from running through the roadblock once it is in place. If at all possible, position at the south side of the Fill Bridge.
- If the Fill Bridge is washed out, Fire Station #4 will become a substation for LAPD for the North Community, Barranca Mesa and North Mesa. A locker at Station #4 has been designated for use by LAPD. This locker contains a cell phone (#469-0718) and basic officer supplies. A key to this locker has been placed on all the unit key rings.

WHITE ROCK

- After receiving a storm warning alert, the White Rock officer will position their unit in the vicinity of Pajarito Road and State Road 4 to monitor the water run-off from Pajarito Canyon in the State Road/Karen Circle area. The White Rock officer will also monitor the water run-off in the Canada del Buey arroyo in the vicinity of State Road 4 and Sherwood area. The White Rock officer will make continual reports to LAPD regarding the water run-off in these two areas. These reports should contain information regarding injuries and property damage, estimated water levels in the arroyos, and water running over the roadways.
- The White Rock Police Substation shall be relocated to Fire Station #3 due to the current substation being on lower ground near the Canada del Buey arroyo.
- Additional officers will be dispatched to White Rock as required and staffing allows.
- Unit #851 will be stationed at Officer Jesse Taylor's residence. The keys for this unit will be at the White Rock substation. Officers who live in White Rock will be issued a key for the White Rock substation.

ADDITIONALLY

- Officers will be ready to respond to LAPD after being contacted to work as a result of flooding. Essentially, this means having a uniform and equipment ready to go at home.

LOS ALAMOS FIRE DEPARTMENT ACTIONS

The Los Alamos Fire Department will:

Pre-event:

- Stage the LAPD training van at Fire Station 4 for shuttle purposes.
- Double stock medical supply lockers at Station 4.
- Stage the Mass Casualty Trailer to Station 4 and stock it with additional medical supplies and mass care supplies, i.e., food, water, blankets and personal care items.
- Stock additional oxygen cylinders at Station 4 basement.
- Stock additional pharmaceutical supplies at Station 4, i.e., cardiac drugs, IV solutions, etc.
- Stock an additional M-series Zoll at Station 4, with 5 lead cable for ECG purposes for the next 90-120 days for use during air transports.
- Provide an area where LAMC staff can store equipment and supplies for temporary emergency room activation.
- Position swift water rescue equipment on both sides of the Diamond Fill and in White Rock.
- Pre-assign swift water rescue team members to report for duty on both sides of Diamond Fill and White Rock.
- Notify Life Guard and National Guard of the plan and Landing Zone Coordinates at LAMC, Golf Course and LA Airport locations.

Initial notice actions:

- Pre-stage assigned units to Fire Station 4.
- Test auxiliary power at Station 4.
- Open Golf Course for LAMC staff.
- Establish landing zone for medevac helicopter.
- Assign Fire Department staff to appropriate locations.

Full breach (or other serious flooding) actions:

- Notifications:
 1. All call of Fire Department Personnel, report to Station 1.
 2. All call of Chief Officers.
- Activate Fire TAC.
- Send representative to County EOC.
- Communications check.
- Check Middle School and determine/ensure it is open for shelter purposes.
- Send (or transport) citizens to shelter if they report to Station 4. As for Y2K, the fire stations will be the contact points for emergency services requests in the event that telecommunications are lost.

PUBLIC INFORMATION CENTER

- In the event a flooding event has a significant impact on Los Alamos the public need for information will be overwhelming. In this event, it would be appropriate to scale the PIC back up to meet information demand.
- The PIC is currently operating at the Los Alamos County Joint Services Center from Monday through Saturday from 9:00 a.m. to 6:00 p.m. The PIC currently has four phones staffed by two volunteers.
- The PIC phone number is 661-2920.
- PIC capabilities can be increased beyond the above listed level by contacting Captain Wayne Brownlee at 662-8229, paging him at 988-0498 or contacting Police Dispatch and asking the dispatcher to contact him.

EMERGENCY MANAGEMENT COORDINATOR ACTIONS

	Office	Home	Pager	Cell
EMC Captain Robert Repass	662-8285	672-9158	984-5836	470-3048
Deputy EMC Jim Griffiths		662-9155	381-0310	

- Upon receiving notice of a storm warning, the EMC will verify weather conditions with the National Weather Service at 1-888-386-7637.
- If the storm could cause flash flooding the EMC will:
 1. Ensure that police dispatch continues with the appropriate agency and department warning notifications.
 2. Begin warning notices to citizens of Los Alamos via activation of some or all of the following means of notification:
 - County-wide Community Action Network (CAN) activation
 - Activation of the Emergency Alert System by contacting KKOB (see following page)
 - Notification of KRSN
 - Activation of CAN list for residences and businesses most at risk
 3. Provide a situation report to State Emergency Operations Center.

In the event that flash flooding causes significant damage to roadways or County infrastructure the EMC will arrange for activation of the County Emergency Operations Center.

ACTIVATION OF THE EMERGENCY ALERT SYSTEM THROUGH KOB AND KRSN

Police and Fire personnel authorized to initiate EAS notifications are shown in the attached table.

1. Pre-script your message, which should run 30-60 seconds. The following text is recommended, but may be modified to fit a specific situation:

"A storm poses an immediate threat of flash flooding to Los Alamos County. (Modify to state "parts of", "White Rock", "Los Alamos townsite" or other appropriate.)

"Residents who reside immediately adjacent to Canada del Buey, those adjacent to Pajarito Canyon Arroyo, and those in homes in Ponderosa Estates adjacent to Rendijja Canyon should monitor water levels closely and be prepared to move to higher ground.

"County Emergency Management strongly recommends that you shelter in place until the danger has passed.

"Stay out of canyons and arroyos. Do not attempt to cross rapidly running water on foot or by vehicle.

"Monitor local radio stations for developments."

2. Call KOB Radio control room at **505-767-9189**. Give your name and password.
3. Record the notification message.
4. Next, notify KRSN at **661-2490**. When asked, give your password.
5. Next, notify LAPD Dispatch Communications Center, which will implement Flood Contingency Plan notifications.

The arrangement with KOB Radio will remain in effect until August 30, 2000, and may be renewed if the situation warrants.

PERSONNEL AUTHORIZED TO INITIATE EAS NOTIFICATION

NAME	PASSWORD
Police Chief Richard Melton	LAPD1
Captain Marla Brooks	LAPD2
Captain Robert Repass	LAPD3
Captain Wayne Brownlee	LAPD4
Lieutenant Glen Mazuranich	LAPD91
Deputy Emergency Mgr. Jim Griffiths	LAPD3A
Fire Chief Doug MacDonald	LAFDLAC
Deputy Chief Doug Tucker	LAFDLAC
Communications Mgr. Jerry Keene	LAFDLAC
Battalion Chief Steve Coburn	LAFDLAC
Battalion Chief Mike Thompson	LAFDLAC
Battalion Chief Juan Pacheco	LAFDLAC
Battalion Chief Mark Sandoval	LAFDLAC
Battalion Chief Wilfred Martinez	LAFDLAC
Battalion Chief Eddie Pullium	LAFDLAC

**PUBLIC WORKS ACTIONS:
EQUIPMENT SPOTTING FOR POSSIBLE FLOOD CONTROL**

The following is a proposal for spotting equipment prior to a potential flood.

North Mesa/Fire Station #4	1	Backhoe with Bucket
	1	Bobcat Steer loader/bucket
	1	Dump Truck
	1	School Bus

We are requesting a fuel station to be assigned to Fire Station #4. This will be a split tank to allow 750 gallons of diesel fuel as well as 50/50 gasoline/diesel fuel on a gravity feed system.

Fire Station #3	1	Backhoe with Bucket
	1	Bobcat Steer loader/bucket
	1	Dump Truck
	1	School Bus

Bayo Plant	Same equipment as above
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Plans have been made to move all equipment from the site to the State's Patrol Yard and will be secured. The intent is to be able to park personnel vehicles there on a daily basis and to drive to the site in County vehicles. As the day ends the equipment would be driven out and stored overnight and the personnel vehicles removed. It is important to alert employees at Bayo as soon as possible to the risk of possible flooding. The fuel station may also need to be moved to higher ground along with the other equipment at the sewer plant.

UTILITIES DEPARTMENT ACTIONS

- A. Command Post center staffing (Fire Station #4)
 - 1. Tim Glasco
 - 2. Two secretaries or administrative aides (phone coordination)

- B. Field Staffing (North side of Pueblo Fill) - Riker's Island
 - 1. One water production crew with vehicle and water
 - 2. Sewer plants (normal staffing)
 - 3. One gas crew with vehicle and tools
 - 4. One 2-man electrical crew with service truck and tools

- C. Utilities Office Staffing
 - 1. Two people to answer phones
 - 2. All engineering section personnel called to work
 - 3. Deputy Utility Manager, Engineering and Electric Distribution
 - 4. Other support staff as necessary
 - 5. Remaining utility crews (gas, water and electrical) called in

- D. Pre-positioning of Drawings, Contact List, etc.
 - 1. System maps of the gas, water, sewer and electrical distribution systems
 - 2. Two hand-held phones with Utilities and Public Works radio frequencies will be pre-positioned at the EOC.
 - 3. Utility personnel radio names (truck numbers, etc.) as well as an organization chart with phone numbers will be pre-positioned at the EOC.

(later)

- E. Damage Control and Restoration of Service
 - 1. Shut-off valves for sewer, water and gas will be clearly marked on one set of system maps available at the North EOC (later)
 - 2. A detailed step-by-step operating procedure will be developed, released and placed at the EOC, Utilities Office and each field crew in advance

(later)

 - 3. All valves and switches will be inspected and tested, exercised, to verify that the device will operated when needed.

- F. Bayo Plant Protection
 - 1. Sandbags or bulldozer
 - 2. Safety of staff

LOS ALAMOS MEDICAL CENTER ACTIONS

The Los Alamos Medical Center will be prepared to set up a temporary emergency room in the northern community in the event of a breach of the Diamond Fill that results in isolation of that section of the community.

- LAMC will establish a temporary emergency room at the Golf Course Building in the event of a breach of the fill and loss of Rendija Canyon Road. LAMC has a plan to staff this facility with nurses and doctors that reside in this section of the community.

1) LAMC will preposition medical supplies and equipment at Fire Station 4.

- The purpose of the emergency room will be to stabilize patients so that they may be airlifted to LAMC or the appropriate locations.
- Initial medevac capability will be provided by Life Guard helicopter.
- Longer-term medevac capability, along with transport of critical medical supplies and personnel, will be provided by National Guard helicopter resources.
- It is vital to notify LAMC prior to a breach of the Diamond Fill so that LAMC personnel can move critical equipment and medication to the site of the temporary emergency room before the risk of isolation of northern community.
- Red Cross will be prepared to support the temporary emergency room staff with meals and cots.

RED CROSS ACTIONS

- Red Cross will be ready to open shelters as needed, based on the Y2K plans and preparations.
- Red Cross is working to prepare the Los Alamos Middle School as a shelter for persons that need housing in the event Diamond at the Fill is breached and the Rendija Canyon road is cut.
- Red Cross will pre-position food, water supplies, cots and blankets in the townsite North of Diamond at the Fill.
- Red Cross and Los Alamos Emergency Management are working to support the three major child day care centers in the northern area (Busy Bee, Little Forest and Los Alamos Gymnastics) in the event that flooding separates children from parents. This will include food, water, blankets, porta-potties and ham radio communications capabilities.
- Red Cross and LosAEM are working to support the two day care centers in White Rock which are located along arroyos (Horizons Day Care at Methodist Church and Sage Cottage on Longview). In the event of flooding these two day care centers may need to be evacuated to Pinon School.
- The primary contact person for activation of Red Cross resources will be Marla Griffith at 662-4330 or by cellular at 660-4523.
- The secondary contact person will be Carolyn McAboy at cellular 207-229-0994.

NATIONAL GUARD ACTIONS

In the event of flooding that isolates sections of Los Alamos, a request for National Guard assistance should be initiated through the State Emergency Operations Center. Pre-event discussions between County officials and National Guard Command staff have been held and National Guard can likely offer the following assistance, if authorized by the Governor's office:

- Helicopter medical evacuation and movement of emergency stores to isolated sections of town.
- Staffing assistance with emergency rebuilding of utilities infrastructure
- Staffing assistance with emergency rubble and debris removal
- Staffing assistance with emergency bridging/road building operations
- Assistance with potable water and generators

State Emergency Operations Center: 476-9600

State EOC after hours contact State Police District One: 827-9301

UTILITIES INFRASTRUCTURE LOSS SCENARIOS

Utility Services Impact Analysis For Breach of Pueblo Fill: Worst Case Scenario

1. *Sewer Interceptor to Bayo Sewer Plant downstream of old Pueblo Plant is washed out in several places.*

In the event that the Pueblo Canyon sewer interceptor line is washed out, a temporary line will have to be installed until such time as permanent repairs can be made. The temporary line would be laid on top of the ground while trenching is performed to reinstall the permanent line. With the required manholes, and depending on the extent of the destruction of the existing line, construction of the new line could take up to two months. Installation of stabilizing structures such as gabion baskets, rip-rap, etc. could take several weeks more.

2. *Sewer Interceptor across Pueblo Fill is lost.*

A temporary lift station and force main would likely have to be built to pump sewage across what is left of the Pueblo Canyon Fill. If possible, additional fill material could be put in place to allow a gravity main to be laid across the canyon. This temporary bypass pumping could be managed with existing pumps owned by the Utilities Department, or rental pumps could be acquired.

3. *Natural gas main across Pueblo Fill is lost.*

The 100 psi gas main across the Pueblo Fill could be valved off at either side of the fill, and the main through the old Pueblo Canyon Sewer Plan would be utilized to feed gas to the northern sections of town. The only significant impact of this event would be the loss of the loop feed for gas to the northern areas of town.

4. *Natural gas main along North Road "depression" is lost.*

If the North Road 100 psi gas main is lost, then the only remaining gas feed to town would be through the East Border station. If the damage is sustained in the summer when heating loads are down, the East station could handle the load (as it is currently doing). However, if the damage is sustained in colder months when heating loads are high, previous system modeling has shown that the East Gate gas feed is insufficient to carry the load for the entire town, and some gas service in the northern sections of town would be lost.

5. *PNM 400 psi natural gas transmission line is lost.*

As discussed in Item 4 above, the East Gate gas feed is insufficient to carry the load for the entire town during the cold weather months. During warm weather, however, loss of the PNM 400 psi feed does not cause any significant problems other than the loss of reliability that comes with having two feed points.

6. *Water line across Pueblo Fill is lost (loss of diversity between booster pumps and tanks).*

Those sections of town north of Pueblo Canyon are normally supplied with water from the Guaje well field, although the water system is designed to allow provision of water from a variety of sources. While this redundancy would disappear if the Pueblo Fill water line is lost, the Guaje Well Field can supply all of the needs of this northern part of the town by itself. Group 12 water storage tank, which is principal supply for the North Community and North Mesa, is normally fed from either the North Fill Booster Station (North Road and Diamond Drive) or from the Guaje Filter Booster Station (golf course). Loss of the Pueblo Fill water line would eliminate the North Fill Booster Station as a source of supply.

7. *Electrical primary to Guaje well field and Bayo Sewer Treatment Plant lost.*

The Bayo Sewage Treatment Plant is equipped with an emergency generator sufficient to run the plant indefinitely when normal line power is lost. Therefore, loss of the primary power line would not severely impact plant operation. However, if the power line to the Guaje well field is lost in conjunction with the loss of the Pueblo Canyon water line, the result would be loss of water supply to the portion of Los Alamos north of Pueblo Canyon. At least five portable generators of 300 KW capacity or greater would be necessary to restore water service to this portion of town.

8. *Electrical service lost to NC, BM and NM.*

Loss of electrical service to North Community, Barranca Mesa and North Mesa would also mean loss of electrical power to the booster pump stations supplying water to these areas. When the water in the distribution storage tanks serving those areas is exhausted, water service would be lost. At least four electrical generators of 150 KW capacity or greater would be necessary to operate the booster stations and maintain water service. Loss of electrical power to these areas would also mean that the sewage lift stations would be inoperable. The wastewater department is equipped with a mobile generator capable of operating all the lift stations in the system. A crew would travel from lift station to lift station with the generator, pumping each one down and thereby preventing sewage overflows into the environment.

